

# SYNTHOSPIN™ P-100-NF

## CLASSIFICATION

**SYNTHOSPIN™ P-100-NF** is a highly concentrated liquid, non-foaming, “phenol free” antistatic agent.

## SPECIFICATIONS

<b>Appearance</b>	Light amber, clear oily liquid
<b>Solubility</b>	Clearly soluble in water--all dilutions
<b>pH (2% solution)</b>	7.2 ± 0.3
<b>Density</b>	8.6 lbs/gallon
<b>Viscosity</b>	235-245 seconds Saybolt at 100°F
<b>Flash Point</b>	375°F. (open cup)

## GENERAL COMMENTS

- An extremely effective nonionic antistatic non-yellowing agent.
- A very small amount of **SYNTHOSPIN™ P-100-NF** required for most applications.
- Least critical to gumming, particularly on 100% polyesters and blends thereof, especially during spinning.
- Versatile on all synthetics including polyester, acrylic, modacrylics, rayon, Tencel, acetate, polypropylene and nylon.
- Applicable to wool and on most systems such as cotton, worsted, modified worsted (compact), sliver-to-knit and woolen or as a spin finish.
- Readily soluble in water in any proportion to produce an opalescent solution.
- Excellent tint dispersant and easily scoured
- Non-foaming
- A superior drafting (sliding of fibers)

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## APPLICATIONS

### *Polyester*

Since **SYNTHOSPIN™ P-100-NF** is least critical to gumming or loading of the cards, particularly on 100% polyesters and blends thereof. It is finding wide acceptance here (helping a multitude of mills who have tried unsuccessfully other materials on polyesters) for it will not cause roll lapping.

We suggest initially in progressing 100% polyesters, that 0.175% to 0.20% on weight of fiber(owf ) be applied from a 1:9 cut in water at the opening hopper with or without tint. Other difficult blends, such as dope-dyed or stock-dyed modacrylic/polyester blends are processed most successfully with this highly antistatic and fly-reduced material.

*On 100% Polyester or blends:*

0.25% owf **SYNTHOSPIN™ P-100-NF**

0.25% owf **LENOSPIN™ SDS CONC (or SPINRITE)**

### *Acrylic*

On 100% Acrylics, a 0.2% owf add-on from a 1:9 cut in water aids appreciably in reducing carding fly and drop-out, from a more compact lap and reduce shedding during spinning. Mills using lacquer for bobbin identification, indicate that **SYNTHOSPIN™ P-100-NF** does not cause softening of this material nor sticking to the cans during coiling.

*On 100% Acrylics or blends with modacrylics:*

0.25% to 0.5% owf **SYNTHOSPIN™ P-100-NF**

0.25% TO 0.5% owf **LENOSPIN™ SDS CONC (or SPINRITE™)**

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## *Tow Conversion*

Mills who convert particularly Polyester, Rayon, Tencel, Acrylics, Modacrylic (Dynel\*\*) tow, who've had problems with too gummy an antistat and could not easily draft or cut the tow, indicate that with the use of **SYNTHOSPIN™ P-100-NF** their problems have been virtually eliminated.

Generally 0.25% - 0.5% owf application either neat or in a 1:4 cut in water is recommended to be applied at the crimper roll, the lower percentage (0.25%) should be considered initially. We suggest on coarser deniers (up to 40D and 50D) the addition of our cohesive agent, **SPINRITE™** to the **SYNTHOSPIN™ P-100-NF** (1:2/1:4 ratio).

## *Spinning*

During gilling, about 0.25% add-on owf of **SYNTHOSPIN™ P-100-NF** is recommended either neat or from a 1:4 cut in water, particularly on 100% Dacron, Dacron/Wool blends and Dacron/Mohair blends

## *Top Dyeing*

Generally, at the backwasher **SYNTHOSPIN™ P-100-NF** is sprayed either neat or in a 1:4 cut in water at a 0.25% owf add-on. This material will withstand temperatures in the area of 350°F without volatilization or decomposition.

## *On Needle Felts*

Generally, 0.2% to 0.25% owf of **SYNTHOSPIN™ P-100-NF** with or without 0.2% to 0.25% owf of **SPINRITE™** depending on the fiber blend supplies the necessary static protection, lubricity, yields and web cohesion.

## *Sliver-to-Knit*

We find excellent results with the use of **SYNTHOSPIN™ P-100-NF** in conjunction with our cohesive agents **LENOSPIN™ SDS CONC** and **SPINRITE™** on:

- 100% Acrylic or blends thereof with modacrylics
- 100% Polyester
- Solution-dyed polypropylene with blends of Polyesters

\*Approved by E.I. DuPont de Nemours & Co., Inc.

\*\*Union Carbide Corporation